



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

July 1, 2013

Michael B. Crane, District Ranger  
112 Andrew Pickens Circle  
Mountain Rest, SC 29664

**RE: Final Environmental Impact Statement (FEIS) AP Loblolly Pine Removal and Restoration Project, Andrew Pickens Ranger District, Sumter National Forest, Oconee County, SC**  
**CEQ Number: 20130141**

Dear Mr. Crane:

Pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) has reviewed the subject Final Environmental Impact Statement (FEIS) AP Loblolly Pine Removal and Restoration Project, Andrew Pickens Ranger District, Sumter National Forest, Oconee County, SC. The USDA Forest Service is the lead federal agency for the proposed action.

The Andrew Pickens Ranger District, Sumter National Forest proposes to remove non-native loblolly pine and restore native pines and hardwoods in their place on approximately 5,542 acres. The district is situated in the Blue Ridge Mountain Physiographic Province, in the mountain foothills. Stands in the project area were converted to loblolly pine plantations 20 to 50 years ago by clear-cutting more diverse native stands. In some locations loblolly pine has seeded from adjacent stands or previous stands. Current species composition is outside the natural range of variability (NRV), consisting mostly of non-native loblolly pine with few native hardwoods or native pines growing in the overstory. Hardwood sprouts and saplings are common in the understory.

The objective of this project is to restore native vegetation typical of the Southern Appalachian Mountains by removing non-native loblolly pine plantations. This would improve ecosystem health and increase habitat diversity. The majority of the project area (77%) falls within the Shortleaf Pine-Oak Ecological Zone, which in the absence of loblolly pine consists of shortleaf pine- and Virginia pine- and oak-hickory dominated forests in the lower elevation Southern Appalachians. Examples of this zone can occur on a variety of topographic and landscape positions, including ridge tops, upper and mid-slopes, as well as low elevation mountain valleys. Pitch pine (and Table Mountain pine) may sometimes be present and hardwoods are sometimes abundant, especially dry- site oaks such as southern red oak, post oak,

blackjack oak, chestnut oak, scarlet oak, but also pignut hickory and red maple. Frequent, low-intensity fires, coupled with severe fires, can influence the occurrence of pines in this zone, particularly shortleaf pine, pitch pine, or Table Mountain pine, rather than hardwood forests or Virginia pine, under natural conditions (Natureserve, 2011). Other ecological zones in the project area include dry-mesic oak, dry oak evergreen heath and rich cove/acidic cove.

The plan would emphasize improving habitat conditions for a variety of native plants and wildlife species. Commercial and non-commercial treatments would be used to remove loblolly pine trees and native trees would be planted. Emphasis would be placed on restoring, enhancing and maintaining habitat conditions for the federally endangered smooth coneflower (*Echinacea laevigata*) within the species known habitat. Three alternatives were evaluated in detail:

### **Alternative 1 – No Action**

This alternative provides a baseline against which impacts of the action alternatives can be measured and compared. Under this alternative, none of the specific management activities proposed would occur. Ongoing activities such as recreation, prescribed fire, wildlife opening maintenance, already approved timber management activities and road maintenance would continue at current levels. Management activities proposed outside the scope of this document may still occur.

### **Alternative 2 - Proposed Action**

Alternative 2 responds to the Purpose and Need for the project. The alternative consists of regeneration harvest with reserves (cut-and-remove) and regeneration cutting with reserves (cut- and-leave) treatments and the establishment/maintenance of woodlands. Reforestation would be accomplished by natural regeneration or artificial regeneration. Herbicide site preparation and subsequent release treatments would help facilitate reforestation. In woodlands, manual, mechanical and herbicide treatments would be used to reduce woody competition in regenerated stands to help establish or maintain native plant communities including smooth coneflower. Prescribed burning would continue in a coordinated manner with the implementation of this project. Alternative 2 would move forest stand composition and structure toward the natural range of conditions that would be found in the Blue Ridge Mountain Physiographic Province. Connected actions would include system road construction, reconstruction and maintenance. Temporary roads would also be constructed for access.

### **Alternative 3**

The alternative addresses public concerns identified issues relative to system roads, pine plantations and vegetation diversity. To meet the objective of establishing or maintaining a mixed pine/hardwood species composition over time, instead of using a pre-determined, fixed species cutting preference list for all stands, the species selection for cutting/retention, planting, and herbicide application during site preparation and release treatments would vary from one stand to the next. One constant is that loblolly pine would always be targeted for removal. Selection preference for other species would be based on

comparing existing species composition with the natural range of variability for species composition in each stand. Ecological zone information would be used to help define the natural range for species composition. Species that are above their natural abundance would be targeted for cutting or herbicide application. Species that are below their natural abundance would be retained; some of these species would be planted.

Alternative 3 consists of regeneration harvest with reserves (cut-and-remove), regeneration cutting with reserves (cut-and-leave) treatments, and the establishment or maintenance of woodlands. Reforestation would be accomplished by natural regeneration or artificial regeneration. Herbicide site preparation and subsequent release treatments would help facilitate reforestation. In woodlands, manual, mechanical and/or herbicide treatments would be used to reduce woody competition in regenerated stands to help establish/maintain native plant communities including smooth coneflower. Prescribed burning which is already covered under existing project decisions would continue in a coordinated manner with the implementation of this project. Alternative 3 would move forest stand composition and structure toward the natural range of conditions that would be found in the Blue Ridge Mountain Physiographic Province. Connected actions would include system road reconstruction and maintenance. Temporary roads would also be used for access.

## **EPA COMMENTS**

EPA appreciates the effort and planning put into this FEIS. The US EPA is committed to working with the Forest Service to design a plan that would effectively eliminate Loblolly Pine plantations and facilitate the recovery of a true, native forest. We agree that the Loblolly plantations should be converted to native forests and in principle agree with Alternative 2, The Proposed Action, with the following suggested activities to promote overall ecosystem health and increase habitat diversity.

The FEIS relies on the use of herbicides to control/eradicate competing species. While we are not opposed to the use of herbicide to control non-native, invasive species or to release desired dominant, native trees, we discourage the blanket use of herbicides because of their potential impact on water quality and wildlife. We suggest that herbicides be applied by manual backpack sprayers and by the cut surface treatment methods. These methods limit herbicide to targeted vegetation and reduce impacts to non-target vegetation. The use of mitigation measures limiting use to the cut surface treatment in riparian corridors to minimize drift into water should also be considered. Herbicides should not be applied when off-site movement is likely due to rain events. Mitigation measures to ensure that planting take place as soon as practicable after initial treatments are completed should be considered. This would reduce the need to use herbicides. Finally, woodland treatments would use manual and mechanical methods to reduce the need for herbicide treatments.

Regarding the proposal for construction or reconstruction of over 65 miles of Forest Service System Roads, we suggest that any road construction or reconstruction should take into consideration the current road density in the area. If new/reconstructed roads increase the road density to levels in excess of the habitat requirements of forest interior species, alternate

activities should be considered. We suggest that determining which roads are to be reconstructed should be dependent on an analysis of the entire landscape and the principles of conservation biology; the habitat needs of forest interior species; existing road densities.

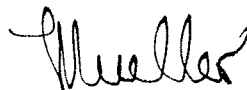
During road construction and reconstruction activities, soil may be displaced and exposed. Soil movement can occur, however, measures designed to stabilize the road surface, such as adding aggregate surfacing by armoring the soil or limiting distance and amount of concentrated flow by installing water diversion devices (dips, reverse grades, out slopes, leadoff ditches, and culverts) should reduce adverse effects.

EPA encourages use of measures that reduce impacts to water quality and ensure channel stability in the project area are identified in Forest Plan standards, BMPs, Region 8 Soil and Water Conservation Practices Guidance, and National Best Management Practices. For example, in accordance with BMPs, drainage structures should be used to reduce concentrated water flow from roads and skid trails and disperse it into forested areas. Also, for example, in accordance with BMPs, road ditch lines should not be routed toward stream crossings, but instead into vegetative buffers. Erosion control devices such as diversions and temporary rock sediment dams should be installed prior to road construction, reconstruction and maintenance activities where needed to deter soil runoff from streams. Erosion control devices should be maintained in working order throughout project activities and until plant growth is established and stable enough to control runoff and erosion. Road reconstruction should not include road widening which would increase sediment input, decrease available in stream habitat and decrease riparian vegetation. New road construction should be located outside riparian corridors and channeled ephemeral stream zones except at crossings. New road stream crossings should be seeded and matted immediately after construction.

We agree that the Loblolly plantations should be converted to native forests and in principle agree with Alternative 2, The Proposed Action, with the aforementioned suggested activities to promote overall ecosystem health and increase habitat diversity. Overall, we suggest that all activities be dependent on an analysis of the entire landscape and the principles of conservation biology, the habitat needs of forest interior species and existing road densities.

We appreciate the opportunity to review the proposed action. Please contact Ken Clark at (404) 562-8282 if you have any questions or want to discuss our comments.

Sincerely,

A handwritten signature in cursive script, appearing to read "Mueller".

Heinz J. Mueller, Chief  
NEPA Program Office  
Office of Environmental Accountability